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ABSTRACT

BLACKBIRDS WITH YELLOW HEADS, DO THEY EAT SUNFLOWERS, TOO?

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Adult "territorial" yellow-headed blackbirds (*Xanthocephalus xanthocephalus*) were collected in five geographical areas during the spring of 1987 and 1988. These areas included southeastern North Dakota, central North Dakota, southeastern Saskatchewan, central Saskatchewan and east-central Alberta. Additionally, periodic collections of yellow-headed blackbirds were obtained from the central North Dakota study area between 21 June and 20 September. When present, food items were removed from the esophagi of collected yellow-headed blackbirds, categorically sorted (sunflower, small grains, weed seeds, insects, wild oats, millet, corn and grit), and individually weighed. The number of spring collected male yellow-headed blackbirds with food items in their esophagi ranged from 88 in Alberta to 171 in southeastern Saskatchewan. Periodic collections provided an additional 260 males and 155 females during the summer (20 JUN-15 AUG) and 483 males and 311 females during the fall (15 AUG-20 SEP) which were suitable for food habits analysis.

Analysis of food items extracted from male yellow-headed blackbirds indicates that in the spring in North Dakota, yellow-headed blackbirds consume significant quantities of sunflower (up to 54% total dry weight). At this time of the year their diets were supplemented with weed seeds (wild oats and foxtail) and grains (millet and corn) in central and southeastern North Dakota respectively. Whereas throughout Canada, sunflower consumption was negligible with small grains representing 75-90% of their diet.

During the summer, male yellow-headed blackbirds consumer primarily small grains and weed seeds with sunflower making only a minor contribution to their diet. However, in the fall males increase sunflower consumption to about a third of their total diet with the bulk of the remainder equally divided between small grains and weed seeds. Although the majority (80%) of these birds were collected in wetlands or from flightlines returning to wetland roosts, an examination of only those yellow-headed blackbirds collected in sunflower fields raised sunflower consumption to only about 40% of the total diet.

On the other hand, limited data on spring collected female yellow-headed blackbirds indicate sunflower is only a minor (<10%) component of their diet at this time of year. The proportion of sunflower in female yellow-headed blackbirds diet declines even further during the summer. And in the fall, sunflower only accounts for about 15% of the females' total dry weight food intake. Indeed, even when examining only females collected within sunflower fields, the total proportion of their diet contributed by sunflower never exceeds 25%.

Since females consume relatively little sunflower, efforts to protect the sunflower crop from yellow-headed blackbirds should be focused on the male of the species. However, when the sunflower crop is vulnerable during the fall, males only obtain about a third of their diet from this source. This, combined with the fact that yellow-headed blackbirds migrate out of the North Dakota sunflower growing area considerably earlier than either red-winged blackbirds or common grackles, tends to indicate that the yellow-headed blackbird is a relatively minor contributor to overall bird depredations to the sunflower crop.